

# ENGINEERING TECHNICIAN IV

Recruitment #1504-1887-001

**List Type** Original

**Requesting Department** DPW-WATER-ENGINEERING

**Open Date** 7/31/2015

**Filing Deadline** 8/21/2015 11:59:00 PM

**HR Analyst** Jeff Harvey

## **PURPOSE**

Provide material and construction inspection for the Milwaukee Water Works (MWW) related infrastructure improvement projects. Conduct fire flow testing and hydrostatic testing to measure, record and verify the water pressures and flow within the MWW distribution system. Perform field investigations to troubleshoot system function anomalies. Assist in system map maintenance.

## **ESSENTIAL FUNCTIONS**

- Inspect the installation of water main replacement conducted by contractors to ensure and enforce proper construction methods and MWW specifications.
- Consult with Engineering staff for field alterations, if needed.
- Ensure MWW specified and inspected materials are properly handled and installed.
- Ensure proper excavation safety and traffic control procedures are implemented and followed.
- Provide customer outreach and communications for those affected by the construction activities and ensure the contractor provides adequate clean-up of the site when finished.
- Provide information to and field questions from contractors, City staff, and the public regarding the status of projects; receive complaints, and recommend solutions or obtain direction from Engineering for resolution.
- Manage the overall project to provide MWW with efficient job completion at the best possible cost.
- Prepare accurate daily records, including making detailed sketches, written and/or photographic reports of work progress and completed projects.
- Ensure that line and grade points comply with markings on the construction staking.
- Inspect and test water main pipe, valves, hydrants, fittings, and all material used as part of the MWW water distribution system.
- Approve or reject materials based upon specifications and acceptable tolerances.
- Conduct visual inspections, hydrostatic testing, pressure testing, torque testing, weights and measurements.
- Prepare detailed written reports of inspections to document findings.
- Communicate with inventory staff as to the status of materials inspected and tested.
- Communicate material defect findings with vendors and manufacturers as requested by Engineering Management.
- Conduct field investigations to troubleshoot system anomalies such as pressure fluctuations and problems with pumping operations. Install, monitor and report results from pressure recording devices.
- Conduct flow tests of hydrants to establish hydraulic analyses and studies, and to determine system robustness. Document the results and provide information to insurance companies on fire flow tests, as requested.
- Conduct inspection of emergency leak repairs by contractors as needed. Document contractor activities, assist with repair materials and complete work orders and requisitions.

- Consult with Distribution Management regarding contractor difficulties or complications. Document job details and provide to Distribution Management.

*Reasonable accommodations requested by qualified individuals with disabilities will be made in accordance with the Americans with Disabilities Act (ADA) of 1990, as amended by the Americans with Disabilities Act Amendments Act (ADAAA) of 2008.*

## **MINIMUM REQUIREMENTS**

1. An Associate's Degree in Civil Engineering or Engineering field and three years of related engineering or construction experience performing duties similar to the essential functions listed above.

### **OR**

Five years of related engineering or construction experience performing duties similar to the essential functions listed above.

- ***IMPORTANT NOTE:*** *To receive credit for college, transcripts are required and must be received by the application period closing date. College transcripts should be attached to your online application. Applications without transcripts attached will be considered incomplete and will be rejected. Your transcript must be legible (readable) and include the following information: the university or college name, your name, the degree completed (if applicable) and the date the degree was completed.*
  - ***NOTE:*** *Equivalent combinations of education and experience may also be considered.*
2. Valid driver's license at time of appointment and throughout employment.

## **KNOWLEDGES, SKILLS, ABILITIES AND OTHER CHARACTERISTICS**

- Knowledge of construction methods and techniques.
- Proficiency with computers and computer software including Microsoft Office and knowledge of Microstation and ESRI is desirable.
- Written communication skills; ability to write technical reports and general business correspondence.
- Planning, organizational, and time management skills; Ability to prioritize work with varying deadlines.
- Problem-solving and analytical skills; ability to use and analyze information to evaluate options and to find the best solution.
- Ability to produce accurate, daily inspection reports, detailed plans, drawings, maps and diagrams using CAD/GIS software.
- Ability to act as the primary on-site coordinator for water main construction projects.
- Ability to read and interpret construction drawings, technical drawings and specifications.
- Ability to use proper tools to measure, estimate and verify construction project specifications.
- Interpersonal and customer service skills; ability to work effectively with culturally diverse individuals inside and outside the organization.
- Ability to work outdoors in inclement weather.
- Ability to work in confined spaces and in trenches.
- Ability to remain standing for long periods of time.

- Ability to lift and transfer work equipment and materials weighing up to 50 pounds and more weight with assistance.

**CURRENT SALARY**

SALARY (3NN): The current starting salary is \$45,185 for City of Milwaukee residents. The non-resident starting salary is \$44,076 annually.

**SELECTION PROCESS**

The selection process will be job related and will consist of one or more of the following: education and experience evaluation; written, oral, or performance tests, or other assessment methods. The Department of Employee Relations reserves the right to call only the most qualified candidates to oral and performance examinations. Oral examinations may include written exercises. Selection process component weights will be determined by further analysis of the job.

INITIAL FILING DATE – The examination will be held as soon as practical after **August 21, 2015**. Receipt of applications may be discontinued at any time after this date without prior notice. However, recruitment may continue until the needs of the City have been met. Qualified applicants will be notified of the date, time, and place of the examination. Unless otherwise required by law, the City of Milwaukee will not provide alternative test administration. The applicant is responsible for attending all phases of the job selection process at the time and place designated by the City of Milwaukee.